What is claimed is:

- 1. A method of inhibition of nitric oxide synthesis which often occurs in hypotension and shock comprising: administering a small but nitric oxide production inhibiting effective amount of an S-alkylthiol to a patient as an antagonist of S-nitrosothiols.
- 2. The method of claim 1 wherein the S-alkylthiol is selected from the group consisting of S-ethylcysteine, S-methylcysteine, S-methylcysteamine, S-ethylcysteamine, S-ethylglutathione, S-methylglutathione, S-methylglutathione, S-methylcoenzyme A, and S-ethylcoenzyme.
- 3. The method of claim 1 where in the S-alkylthiol is selected from the group consisting of S-ethyl-L-cysteine, S-methyl-L-cysteine, S-ethylglutathione, S-methylglutathione, S-methylcysteamine, S-ethylcysteamine, S-methylcoenzyme A and S-ethylcoenzyme A.
- 4. The method of claim 1 wherein the S-alkylthiol is a pharmaceutically acceptable salt form.
- 5. The method of claim 2 wherein the S-alkylthiol is a pharmaceutically effective salt form.
- 6. The method of claim 3 wherein the S-alkylthiol is a pharmaceutically acceptable salt form.
- 7. The method of claim 1 wherein administration is by a method selected from the group consisting of oral, parenteral, enema, and topical.
- 8. The method of claim 1 wherein the dose ranges from 100 mg.

- 9. A composition for use in inhibition of nitric oxide synthesis which often occurs in hypotension and shock, comprising:
- a small but nitric oxide production inhibiting amount of an S-alkylthiol in combination with a pharmaceutically acceptable carrier.
- 10. The composition of claim 9 which includes conventional pharmaceutically additives selected from the group consisting of flavorings, excipients, stabilizers, effervescent agents and antioxidants.
- 11. The composition of claim 10 wherein the conventional additives are less than 100% by weight.